

Appl. No. 10/017,513  
Response dated December 7, 2005  
Reply to Office action of December 01, 2005

### **REMARKS/ARGUMENTS**

Applicants thank examiner Grier for the thoughtful office action of December 1, 2005 removing the rejections of Shinohara. Applicants wish to request reconsideration of the rejection of presently amended claims in respect to the newly cited prior art of Takahashi et al.

Applicants have amended claim 1 to more clearly point out that the audio signal inputs of element a) are not required to have an audio signal coupled thereto as is known from element b). Claims 2 and 5 have been amended to more clearly point out that at least one of element b) and c) is capable of automatic operation. As previously worded, "may automatically" would properly be interpreted to mean is capable of but the examiner may not have fully appreciated the additional limitation. It is believed that these amendments do not change the scope of the amended elements but rather reduces the opportunity for an unscrupulous infringer to assert an unintended meaning or scope.

Additionally, applicants have amended independent claims 1, 4, 7 and 8 to more clearly point out and specify the invention which applicants seek to protect by reciting digital input capabilities.

Claims 2, 5 and 9 have been rewritten into independent form. It is noted that Takahashi et al does not describe or fairly suggest at least one of element b) and c) which automatically changes in response to an input signal as claimed in element f). Claim 9/8 is now independent 15.

Claims 11 and 12 were previously indicated allowable if rewritten to overcome the 112 second paragraph rejections and include all of the limitations of the base claim. 11/7 and 12/7 are now 11 and 12, 11/8 and 12/8 are now 13 and 14.

### **112 Rejections**

The examiner rejects claims 1-12 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirements stating "[r]egarding all independent claims (1, 4, 7 and 8), they initially recite one audio signal is being selected and is carried via one or more channels – step b, then later, the claim language recites, "... outputting all channels of the said processed signal in a plurality of distinct known forms" in element d.

The examiner further rejected the claims under 35 U.S.C. 112, second paragraph stating "A broad range or limitation together with a narrow range or limitation that falls within the broad range

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or limitation (in the same claim) is considered indefinite ...” and “In the present instance, claims 1, 4, 7 and 8, respectively recites the broad recitation one audio signal is being selected and carried via one or more channels, and the claim also recites “... outputting all channels of the said processed signal in a plurality of distinct known forms” which is the narrower statement of the range/limitation.”

Applicants respectfully requests reconsideration of these rejections in that it is believed that the examiner has misconstrued the claim language. In the first instance of claim elements a) and c) where the word channel refers to the channel via which the signal is carried, the meaning is synonymous with pathway or passage (for example as used in respect to 62 and 63 of Fig. 3, page 19, lines 16-17). The context of the phrase makes this usage clear “a processed signal carried via one or more channels” (element c) of claim 1).

In the second instance the channels of claim 1 element d) where channels refer to the channels making up the processed signal, for example left and right channels of a stereo audio signal (for example see page 8 line 21 – page 9 line 4). The context of the phrase makes this usage clear “responsive to all channels of said processed signal” (element d of claim 1). Thus the two nouns “channel” the examiner points to (the path channel of elements a) and c) vs the parts of the signal channel of element d) are different things.

Note also the absence of the wording “said channel” in claim element d). Both definitions of the noun channel are proper and widely known and used in the art. The person of ordinary skill in the art would know from the specification teachings and the context of usage in the claims that the two channels at issue are different things and further would not find the claims indefinite.

As an example, an audio signal can be made up of more than one channel, such as left and right, the two being parts of but one audio signal. The left and right channels can be carried via one channel (pathway) such as with a SMPTE digital signal which includes both the left and right channels in one data stream, which data stream is carried via one digital channel or pathway.

As another example, for audio signal made up of left and right channels, the two being parts of but one audio signal, the left and right channels (separate left and right signals) can be carried via two channels (pathways) such as with separate left and right analog signal pathways or separate left and right digital signal pathways.

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The left and right channels of the audio signal examples above can be output, for example as in the claim 1 language "d) a plurality of output circuits, each responsive to all channels of said processed signal of c) to output said processed signal in a distinct known form," would mean each output circuit is responsive to both the left and right channel (signal) parts of the processed signal. The output circuit would respond to the left and right channels (signals) of the audio signal (e.g. the SMPTE example above) carried via a single channel (pathway) or it would respond to the left signal carried via a first channel (pathway) and the right signal carried via a second channel (pathway). Again, the two definitions of the noun channel are well known to the person of ordinary skill in the art, and the correct one of the two meanings will be readily understood from context such that there is no uncertainty or indefiniteness associated with such usage.

### 103 Rejection

The examiner rejected claims 1-10 under 35 U.S.C. 103(a) as being anticipated by Takahashi et al. U.S. Patent 4,275,268.

With respect to claims 1, 4, 7 and 8, the examiner points to Applicants' Admitted Prior Art (AAPA) and states Takahashi fails to disclose monitoring and processed signal audibly or visually, whereas AAPA discloses audible and visual audio monitoring. The examiner states "[t]hus it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify Takahashi by providing a well known technique of audio monitoring of the selected audio signal during processing for the purpose of enabling a user and/or operator of an audio mixer or a listener an opportunity of control and/or maintain the audio signal processing technique in real time as desired to acquire optimal audio output."

Reconsideration of this rejection is respectfully requested. The examiner has not pointed to a motivation to combine or where in Takahashi et al the suggestion to combine audio monitoring is found (see MPEP 2143.01 incorporated herein by reference).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. (MPEP 2143.01 I, 3<sup>rd</sup> paragraph)

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The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (MPEP 2143.01 III)

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. (MPEP 2143.01 IV)

The examiner points to monitoring: a) of the selected audio signal, b) for the purpose of enabling a user and/or operator of an audio mixer or a listener an opportunity of control and/or maintain the audio signal processing technique, c) in real time as desired to acquire optimal audio output. It is believed that the examiner has viewed the Takahashi reference with impermissible hindsight reconstruction in that there is no teaching or suggestion found in Takahashi to make the combination or which supports these elements a), b) and c) which the examiner points to.

Furthermore, the examiner has not pointed to any motivation to combine. What particular problem or incentive was there, which was known to the person of ordinary skill in the art at the time of the invention, which lead that person to monitor the selected audio signal from switch 17, or to control or maintain the audio signal processing technique of 19 or acquire optimal audio output of 9 or 10 in real time? The examiner has pointed to no facts or evidence leading to this motivation.

To the contrary, those reasons given by the examiner for the combination are believed derived from applicants' teachings "AAPA discloses audible and visual audio monitoring. Thus, it would have been obvious ... ." By comparison in Applicants' recognition of prior art problems given starting at line 3 of page 2, and Applicants' summary of invention starting at page 3, line 16 describe "cost effective and simple to operate ... monitoring .. to provide visual monitoring, audible monitoring, ... monitoring for digital errors, ..." (page 3 lines 17-22) and "... monitoring of levels, monitoring of frequency content ..., monitoring of distortion, monitoring of errors, or any other monitoring which is useful in producing or distributing electronic signals and particularly audio signals (page 4 lines 1-5) and "... for example the combination of a visual level monitor and voice over mixer and visual level monitor ..." (page 4, lines 10 - 11).

Applicants believe it is improper to rely on Applicants' disclosure teaching the usefulness and desire to combine monitoring and signal processing as making the combination obvious at the

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time of applicants' invention. This is not to say that Applicants deny that monitoring in and of itself was known, as described for example in respect to separate, complex and expensive instruments at page 2, lines 5 – 18, however it is the inventive combination including monitoring which is claimed.

Additionally, Applicants respectfully traverse the examiner's characterization of the teachings of Takahashi et al. The examiner points to 3a, 3b and 1 as providing the claimed plurality of audio signal inputs and switches for selecting the audio signals. Element a) of claim 1 calls for a plurality of audio signal inputs and element b) a selector for selecting the audio signal which may be present at one of the inputs of a). According to the examiner's interpretation then 3a, 3b and 1 correspond to element a), and switches 15 and 17 to element b) of claim 1.

The examiner then points to mixing circuit 19 coupled with matrix element 20 as reading on the signal processing, claim element c). The examiner points to digital and analog outputs 9 and 10 as corresponding to claim element d) plurality of output circuits.

Applicants respectfully note that if optional D/A 21 is used, digital signal 9 is no longer the output signal, but is replaced by 10 (column 2, lines 38-41). In other words, the output is either digital signal 9 or analog signal 10, but not both, according to the teachings of Takahashi et al. This does not meet the claim language of "each [output circuit] responsive ... to output said processed signal in distinct form" i.e. there must be a plurality of output signals. The other rejected claims contain similar limitations. If it is assumed that the two outputs are the top 9 and top 10 of Figure 2, then it will be noted that they do not respond to all channels of the processed signal as required by element d).

Applicants have amended independent claims 1, 4, 7 and 8 to more clearly specify and distinctly claim the invention by reciting the nature of one or more digital inputs in element a). Applicants note, in view of the traversal of the 103 rejection of these claims given above, that such amendment is not necessary for reasons of patentability, rather is desired by applicants to achieve such specificity and distinction. If however the examiner maintains the combination of Takahashi et al. and monitoring as obviating claims 1, 4, 7 and 8, applicant will rely on the amendments to these claims specifying the digital inputs to overcome Takahashi. Applicant respectfully requests the examiner's statement as to the reason for allowance of these independent claims.

The examiner rejected claims 2, 5 and 9 as met by Takahashi et al. as obviously disclosing establishing a parameter by an operator as evident by the manual adjustments (col. 1, lines 51-57).

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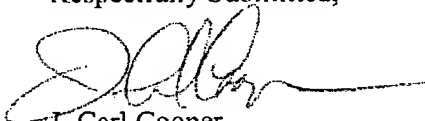
Reconsideration of this rejection is respectfully requested. It is noted that claim 2 calls for "said elements b) and c) operate in response to said parameters" and "such that at least one of the selecting of b) and the processing of c) automatically changes in response to at least one signal present on one said input of a)." Thus claim 2 requires both elements b) and c) to operate in response to the parameters and one of elements b) and c) to automatically change in response to an input signal. In Takahashi, there is no teaching or fair suggestion that both of the selector switches (15 and 17) and the matrix and multiplier 19 operate in response to the parameters pointed to by the examiner. The mixing values the examiner points to at column 1, lines 51-59 only affect the matrix and multiplier 19. Additionally there is no teaching or suggestion that any one of 15, 17 or 19 automatically changes in response to an input signal.

Similarly, claims 5 and 9 requires at least one of the selecting step b) and the processing step c) automatically change in response to at least one input signal. No such capability of automatic change in response to the input is taught or fairly suggested by Takahashi et al.

The examiner rejected dependent claims 3, 6 and 10 in respect to Takahashi's mixing circuit. Applicant respectfully requests reconsideration of the rejection of these claims in respect to the differences between the claims from which they depend as pointed to above.

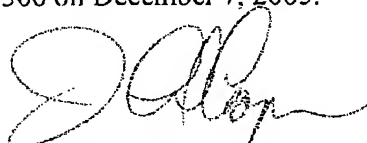
In that the application is believed in form for allowance, further action in that respect is respectfully solicited.

Respectfully Submitted,



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I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office, Fax No. (571) 273-8300 on December 7, 2005.



J. Carl Cooper